



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/419,968 10/18/99 SARKAR

S PA990566

023696  
Qualcomm Incorporated  
Patents Department  
5775 Morehouse Drive  
San Diego CA 92121-1714

WM31/0727

EXAMINER

SONG, H

ART UNIT

PAPER NUMBER

2131

DATE MAILED:

07/27/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/419,968

Applicant(s)  
SAKAR et al.

Examiner  
Ho S. Song

Art Unit  
2131



— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Oct 18, 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Owens et al.(US 5,481,611) or Lee et al(US 4,484,027).

In claim 1, Owens teaches processing a received signal and extracting random data bits from processed receive signal in (fig.1). Lee teaches in (fig.1,##36,34).

2. Claim 5 is rejected under 35 U.S.C. 102(e) as being anticipated by Takamatsu (US 5,963,141).

In claim 5, Takamatsu discloses generating a random numbers from data bits generated from existing wireless phone hardware and encryptor for encrypting a signal using said random numbers in (fig.2 and col.7, lines 12-23).

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 2,4,6,8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owens et al.(US 5,481,611) or Lee et al.(US 4,484,027) in view of Waldroup et al.(US 6,070,058).

In claim 2, Lee or Owens discloses all the limitations above. Lee or Owens does not discloses step of processing received signal with a receive automatic gain control circuit(AGC). Waldroup's patent(US 6,070,058) discloses processing received signal with a receive automatic gain control circuit(AGC) in (col.9, lines 12-23). It would have been obvious to person of ordinary skill in the art at the time the invention was made to employ AGC taught in Waldroup with receiver disclosed in Lee or Owens in order to control such amplitude variations such that cellular phone or wireless device keeps in-band energy is transmitted to demodulator at a fixed level thus allowing incoming received signal to be normalized.

In claim 6, Takamatsu discloses all the limitations above. Takamatsu does not discloses step of processing received signal with a receive automatic gain control circuit(AGC). Waldroup's patent(US 6,070,058) discloses processing received signal with a receive automatic gain control circuit(AGC) in (col.9, lines 12-23). It would have been obvious to person of ordinary skill in the art at the time the invention was made to employ AGC taught in Waldroup with receiver disclosed in Takamatsu in order to control such amplitude variations such that cellular phone or wireless device keeps in-band energy is transmitted to demodulator at a fixed level thus allowing incoming received signal to be normalized.

In claim 4, Lee or Owens discloses all the limitations above. Lee or Owens does not discloses Time Tracking Loop. The examiner takes Official notice that Time Tracking Loop is

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well known in the art especially in the wireless communication environment. One of ordinary skill in the art would be motivated to use Time Tracking Loop in order to track variations in the receive propagation delay over time and thus maintaining bit synchronization.

In claim 8, Takamatsu discloses all the limitations above. Takamatsu does not disclose Time Tracking Loop. The examiner takes Official notice that Time Tracking Loop is well known in the art especially in the wireless communication environment. One of ordinary skill in the art would be motivated to use Time Tracking Loop in order to track variations in the receive propagation delay over time and thus maintaining bit synchronization.

5. Claims 3,7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owens et al.(US 5,481,611) or Lee et al.(US 4,484,027) in view of Lee et al(US 6,038,266).

In claim 3, Lee or Owens discloses all the limitations above. Lee or Owens does not disclose processing received signal with a DC Offset Correction Loop. Lee discloses DC offset correction circuit in (col.10, lines 53-55). It would have been obvious to person of ordinary skill in the art at the time the invention was made to employ DC offset correction circuit taught in Lee with receiver disclosed in Lee or Owens in order to prevent instability of signal as well as correct for DC offset.

In claim 7, Takatmatsu discloses all the limitations above. Takamatsu does not disclose processing received signal with a DC Offset Correction Loop. Lee discloses DC offset correction circuit in (col.10, lines 53-55). It would have been obvious to person of ordinary skill in the art at the time the invention was made to employ DC offset correction circuit taught in Lee with

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receiver disclosed in Takamatsu in order to prevent instability of signal as well as correct for DC offset.

6. Any inquiry concerning this communication from the examiner should be directed to Examiner Ho S. Song at telephone number is (703)305-0042. The examiner can normally be reached on Tuesday-Friday from 6:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gail Hayes, can be reached on (703)305-9711.

Any inquiry of a general or relating to the status of this application or proceeding should be directed to the Technology Center receptionist whose telephone number is (703)305-3800.

*Ho Song*

*Gail Hayes*  
GAIL HAYES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

**Attachment for PTO-948 (Rev. 03/01, or earlier)**  
**6/18/01**

**The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.**

**INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

**1. Correction of Informalities -- 37 CFR 1.85**

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

**2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.**

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

**Timing of Corrections**

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.